

GOVERNMENT SUPPORT OF THE MERCHANT
MARINE PROBLEMS AND PROSPECTS

by

Edward Keith Walker

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PROBLEMS AND PROSPECTS

By

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CHAPTER I

INTRODUCTION

The U.S. Merchant Marine is at a crossroads; it must be rebuilt and modernized or it will die. The urgency of the situation was forcibly brought out in a recent statement by Andrew E. Gibson, the Maritime Administrator, in which he said, "We are three or four years away from disaster."¹

That the present status of our Merchant Marine is one of decadence is of little doubt. In the U.S. flag fleet, 80 per cent of our ships are over 20 years old² and within the next four to five years most of these will be scrapped.³ Thus, if new financing and increased shipbuilding are not soon forthcoming, our American flag merchant fleet will all but disappear from the seas by 1980.

This situation did not develop over night nor can it be attributed to any one particular cause. Unhappily, because there are multiple causes behind the current problems, the solutions are necessarily complex. Further, those who would provide help and participate in the remedial efforts do not speak with one voice. There are, in fact, many contending and contentious factions in our society, each vying for its own slice of the pie and protecting its own special interests. These various interest groups either loudly praise or vehemently damn the Merchant Marine, depending upon the perspective of the commentator; none of whom is dispassionate. To some, the current state of affairs is the fault of the ship owners and operators,

¹Miriam Ottenberg, "Crisis at Sea," The Washington Star, August 3, 1969, P. A1.

²Admiral T.H. Moorer, USN, CNO, "Remarks Before the VFW National Convention," Philadelphia, Pa., August 19, 1969, p. 1. (Mimeographed.)

³U.S. President, Message to the Congress, "Merchant Marine Program", Press Release, (Washington, D.C.: The White House, October 23, 1969), p. 1. (Mimeographed.)

while others believe the blame variously belongs to the shipbuilders, the Government, unions, shifting trade patterns or an apathetic American Public.

For years, while the various factions were all agreed that our commercial shipping industry was dying and were freely passing out blame, there was no consensus that a distinctly American Merchant Marine was an asset or a national necessity. Consequently, there was no agreement that the industry which we had in being should be perpetuated. The case for or against a U.S. flag capability has been argued at length over the past two decades, but it now seems that the day has been carried by those who would see us continue in world wide oceanic commercial trade. Despite some continuing and rather vehement opposition,¹ there is now wide agreement that an American Merchant Marine of considerable size and vigor definitely is an asset and its operation is in the national interest. The Administration, Congress, the various segments of the industry, and indeed, the public, have closed ranks in support of the concept of a new, modern and vigorous Merchant Marine.²

However, this new found wealth of support does not solve the basic problems which have traditionally plagued U.S. flag commercial carriers; high building and operating costs, and disruptive and costly labor practices. Nor does it mean that those who support the concept and ultimate goals are in agreement as to the methods and means which should be employed to achieve these ends. One point of agreement between all factions is that the Government holds the key position, and that its policies and actions will determine the shape and direction of the future.

¹Leonard A. Rapping, "Testimony Before the Joint Economic Committee, Subcommittee on Economy in Government," Washington, D.C., September 24, 1969. (Mimeographed.)

²"U.S. Shipping Steers Back into the Money," Business Week, December 13, 1969, p. 57.

Most Government support has traditionally taken the form of subsidies, supplemented by certain other economic benefits and special privileges. It is the purpose of this paper to review Government support over the recent past, and to attempt to gauge the degree to which it has met its objectives. The paper also analyzes the industry's efforts at self help and the Government support proposed for the next decade. The comprehensive new program, announced by the President on October 23, 1969, is used as the basis for comment on future Government support.

Chapter II provides background, and places the present problems in perspective, by briefly outlining our merchant shipping history and reviewing the current status of the Merchant Marine. It also compares our current capability with that of other major maritime nations and discusses the role of the Merchant Marine in national security. This is done to put Government support in context and to provide an information data base. The paper assumes that the argument over the need for a U.S. flag fleet has been settled in favor of maintaining this capability.

Chapter III reviews the basic support legislation and discusses the objectives of the various acts. It then analyzes the specific financial supports provided for in the legislation and the effectiveness of each of these support programs.

Chapter IV reviews and analyzes the new programs undertaken by the industry itself and discusses their prospects for success. It also reviews the new maritime program enunciated by the President and discusses the options which are open to the Government.

Chapter V summarizes Chapters I through IV and draws conclusions as to the prospects for the future of Government support to the Merchant Marine.

CHAPTER II

BACKGROUND

Before discussing the specifics of the various Government support programs and their effect upon the Merchant Marine, it is considered necessary that a framework be provided within which to judge the effectiveness of the support which has been furnished. This frame of reference will be established by a brief review of our merchant history, a comparison of our current capability with that of other major maritime powers, and a discussion of the role of the Merchant Marine in national security.

HISTORICAL REVIEW

The European related history of North America has always been a child and a creation of the sea. Whether you believe the Vinland legend¹ or the less controversial story of Columbus, there is no doubt that the discoverers of this new land came by sea. At first, the history of this strange continent was really the log of the maritime daring of the peoples of Europe, and the story of the ships and sailors who were the vanguard of its civilization. After the adventurers and discoverers came the colonists and early settlers, and ultimately, great waves of immigrants, all by sea, generally in decrepit ships of questionable lineage and seaworthiness.

The first ship of any size constructed in America was the 30 ton VIRGINIA, built in what is now Maine in 1607.² Throughout the colonial period the shipbuilding and trading skills of the colonists rapidly increased, and Yankee ships became familiar sights in many world ports. The Government did nothing to aid ocean commerce, in fact, restrictive maritime acts imposed by Parliament, in a vain attempt to control these seagoing

¹R. A. Skelton, "The Mapping of Vinland," American Heritage Magazine, October 1965, pp. 9 and 10.

²Howard I. Chapelle, The History of American Sailing Ships, (New York: W. W. Norton and Company Inc., 1935), p. 6.

horsetraders, contributed significantly to the unrest leading to revolution.

The Revolutionary War saw the virtual destruction of the American merchant fleet, as the British swept our trade from the seas. However, the importance of commercial shipping was not lost on the new country and immediately after the war it passed the first legislation designed to aid the shipping industry. In 1789, a law was enacted which provided that in order to have American registry, a ship had to be owned by a United States citizen and have been built in this country. The Congress further provided benefits to U.S. ship owners and operators by imposing lower import duties and customs on items which were carried in American registry ships.¹

On the heels of our own revolution came that of the French, and then Napoleon and a world war. The entire era of the Napoleonic struggles was one of increasing restriction on American commerce, including a self imposed embargo, culminating in the War of 1812. Again, as in the Revolution, our transoceanic and coastal shipping were completely decimated.

The wars of the latter part of the eighteenth and the early nineteenth centuries forced the American shipbuilder and trader to improve his ship design, as well as his commercial skills, for speed might be his only salvation in meeting with an enemy brig or frigate. These lessons, well learned in war, were applied immediately to the drive for commercial supremacy at sea when hostilities ceased. In this period, the great China and Spice Islands trades were opened and the United States entered upon the world scene as a maritime nation of considerable consequence. As the mid-nineteenth century approached, not only were U.S. ships carrying most of our own trade but they were also carrying a good percentage of the trade of many

¹Paul M. Zeis, American Shipping Policy, (Princeton, N.J.: Princeton University Press, 1938), pp. 1-3.

other nations. This was the period of American commercial shipping mastery, the age of the clipper ships; "--- the most beautiful creations of man in America. --- These were our Gothic cathedrals, our Parthenon; but monuments carved from snow. For a few brief years they flashed their splendor around the world then disappeared with the finality of the wild pidgeon."¹ Unfortunately, this position of preeminence was truly fleeting, its passing caused by the effects of the Civil War and a reluctance to switch to steam. By the 1870s, the position had changed so drastically that U.S. flag ships were carrying less than 40 per cent of our foreign commerce as compared to 90 per cent in the 1840s. The merchant fleet continued to decline, and by the time World War I started its share of U.S. seaborne trade was less than 10 per cent.²

World War I precipitated a major shipping crisis because the U.S. could not move its own commerce, and the ships of other countries were not available to pick up the slack. President Wilson, in his Third Annual Message to Congress in May 1915 stated, "It is high time we repaired our mistake and resumed our commercial independence on the seas."³ A number of measures were taken, the most important of which was a major building program. This program produced hundreds of ships but they were completed too late to be of significant help in the war effort. As a consequence, the United States found itself saddled with a merchant fleet far in excess of its peacetime needs. Most of the wartime construction rapidly found its way into ship graveyards or the wrecker's yard to be broken up for scrap.

¹Samuel E. Morison, The Oxford History of the American People, (New York: Oxford University Press, 1965), p. 584.

²U.S. Maritime Commission, Handbook of Merchant Marine Development and Regulation in the United States, (Washington, D.C.: Government Printing Office, 1940), p. 177.

³Committee of American Steamship Lines, The American Merchant Marine, Hero in War - Stepchild in Peace, (Washington, D.C.: Committee of American Steamship Lines, 1966), p. 4.

The fat-in-war, lean-in-peace cycle has continued ever since. The number of ships steadily declined until World War II, when another massive building effort began. After the war, the ships went up many of the country's rivers to be mothballed and tied together in huge rafts, to sit and wait for the next crisis. It came, in the form of the Korean War, but again the crisis ebbed, only to return and dominate the 1960s by requiring a major support effort in Southeast Asia.

CURRENT CAPABILITY

According to the latest official figures, dated December 31, 1968, the total U.S. Merchant Marine is comprised of 2071 ships, of which only 967 are privately owned, the remainder being Government owned, with 932 of these non-operational in the Reserve Fleet, and the other 172 in custody of, or under charter to, the various federal departments.¹ In the privately owned segment of the fleet, approximately one-third are directly subsidized in one way or another. The merchant fleet carries only 4.8 per cent of our international commercial cargo trade although 99 per cent of this trade, by tonnage, moves by sea.² Table I below, shows the fluctuations in the size of the U.S. flag fleet over the past several years and also depicts the per cent of U.S. international cargo moving in these ships. By law, all of our domestic seaborne commerce and Great Lakes cargo moves in American registry shipping.

¹U.S. Department of Commerce, Maritime Administration, Merchant Fleets of the World, (Washington, D.C.: U.S. Government Printing Office, 1969), p. 13.
²VADM L. P. Ramage, USN, Commander MSTS, "Remarks Before the New York Yacht Club," New York, May 15, 1969, p. 9. (Mimeographed.)

TABLE I

PERCENTAGE OF TOTAL U.S. FOREIGN TRADE
TONNAGE CARRIED IN U.S. FLAG FLEET
AND
NUMBER OF ACTIVE SHIPS IN THIS FLEET,
1950 TO 1968

<u>YEAR</u>	<u>SHIPS</u>	<u>TRADE IN U.S. SHIPS (%)</u>
1950	1145	43.0
1955	1163	30.0
1960	1073	11.0
1963	1017	9.0
1966	1167	7.7
1968	1139	4.8

Source: Data in this table has been derived from a wide variety of Maritime Administration statistical sources and has been synthesized and combined for relevant presentation.

In the following table, the composition of the active U.S. fleet as of December 31, 1968, is displayed:

TABLE II

ACTIVE U.S. MERCHANT FLEET, 1968
(1000 GROSS TONS AND OVER)

<u>TYPE OF SHIP</u>	<u>NUMBER OF SHIPS</u>	<u>DEADWEIGHT TONS (MILLIONS)</u>
Combination Passenger and Cargo	26	.23
Freighters	784	8.96
Bulk Carriers	50	.98
Tankers	279	6.96
Total all Ships	1139	17.13

Source: U.S. Department of Commerce, Maritime Administration, U.S. Merchant Fleet: Composition (Washington, D.C.: Maritime Administration, 1969), p. 1.

The figures of Table I emphatically portray the fact that we are again, as pointed out by President Wilson in 1915, a commercially dependant nation. We are the world's greatest trading nation, and yet can not come close to meeting our own transportation requirements at sea.

By contrast the Soviet Union currently carries 50 per cent of its own seaborne commerce and it is projected that, by 1975, the figure will have risen to not less than 75 per cent.¹

The projected major increase in the size and carrying capacity of the Soviet merchant fleet is no accident, for it is their goal to be free from reliance on foreign shipping. Their published statements and plans indicate that they are going to develop the largest merchant fleet in the world; "In the words of Mikhail Bakayev, USSR, Minister of the Merchant Marine, 'to gain control of the seas.' More explicitly, Soviet maritime goals have been defined as:

- (1) To free the USSR from reliance on foreign-flag ships;
- (2) To exert a decisive influence on the world level of maritime freight rates;

(3) To become a major carrier of the commerce of other nations."²

In order to make these dramatic gains the Soviets have been engaged in a major shipbuilding program for over two decades. In the period 1950 to 1968, the Soviet merchant marine took delivery of approximately 10 million tons of shipping capacity, increasing the fleet from 432 ships to its current total of 1,634.³ Table III, below, presents a summary of the ships under

¹Ottenberg, "Crisis at Sea," Washington Star, August 3, 1969, p. A1.

²U.S., Congress, House, The Soviets and the Seas, H. Rept. 1809, 89th Cong., 2nd sess., 1966, p. 21.

³Edwin M. Hood, President, Shipbuilders Council of America, The Growing Spectre of the Soviet Union on the High Seas, (Washington, D.C.: Shipbuilders Council of America, 1967), p. 5., and MARAD data.

construction or on order for both the U.S. and the Soviets for the seven year period 1962 through 1968.

TABLE III

SHIPS UNDER CONSTRUCTION OR ON ORDER FOR THE U.S. AND USSR, 1962-1968
(1000 TONS AND OVER)

YEAR	SHIPS		DEADWEIGHT TONS (MILLIONS)	
	US	USSR	US	USSR
1962	61	225	.88	2.26
1963	47	236	.70	3.03
1964	47	441	.73	3.46
1965	39	464	.55	4.27
1966	48	556	.64	4.52
1967	48	462	.72	4.46
1968	62	458	1.26	3.89

Source: Shipbuilders Council of America, Annual Report, 1968, (Washington, D.C.: Shipbuilders Council of America, 1969), p. 4.

Although these ships and tonnages do not represent actual increases in fleet size and capacity in each year, they do show the level of construction activity related to the merchant marine in each country. Over the past several years, actual new ship deliveries to the Soviet merchant fleet have outpaced deliveries to the U.S. flag fleet by a ratio of 8 to 1. In 1965, for example, 129 ships were delivered to the Russian fleet while only 16 were added to the American fleet.¹ The 458 ships under construction or on order for the Soviet Union, in 1968, represent approximately 24 per cent of the total number of ships under construction or on order for all the maritime nations of the world for that year.

¹Hood, The Soviets on the High Seas, p. 8.

Another means of comparison is the amount of capital spent by each country for ship construction. The Soviet Union spent the equivalent of \$600 million in building ships for its merchant marine in 1968; the U.S. spent \$150 million. This is not the full story either, for it costs the U.S. at least twice as much as it costs the Soviets to build each ship.¹

The following tables show the comparative rankings of the several leading maritime nations, based on registration, and the relationship of the size of the U.S. merchant fleet to the overall world merchant fleet. Two significant things must be borne in mind when using these tables. First, the U.S. fleet, as it is displayed, is composed of two parts, the privately owned segment, which is the primary concern of this paper, and the Government owned segment, controlled by MARAD. The Government owned portion accounts for 53 per cent of the U.S. ship totals and 40 per cent of the tonnage. Of the MARAD ships, over 80 per cent are in mothballs and are useless short of a major national emergency; and of the remainder, all but a handful will be taken out of active service by 1973 because of age and decrepit condition. These MARAD ships, along with the many old and obsolete ships included in the figure for the privately owned segment, tend to drastically distort the actual relationship of the U.S. capability to the rest of the world fleet. Secondly, the figures for Liberia and Panama are inflated by the registration of foreign owned and operated ships under these flags. The "flag of convenience" ships are owned by companies from many countries, with U.S. operators being active participants in this legal loophole which reduces operating costs, taxes, and Government regulation and control. In 1968, American-owned shipping registered under foreign "flags of convenience" amounted to

¹VADM Ramage, "Remarks to N.Y. Yacht Club," p. 9.

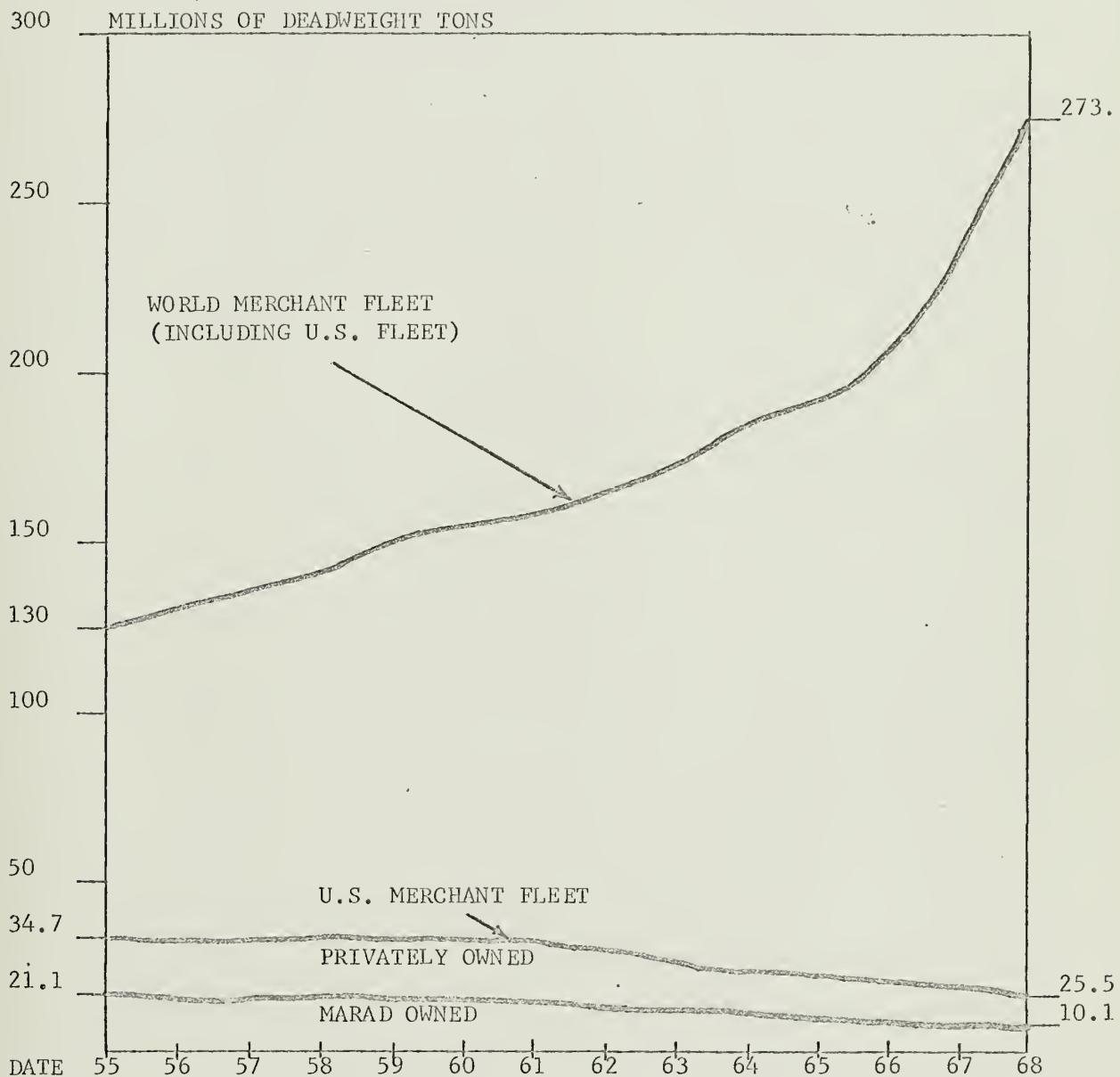
about 16 million deadweight tons and this capacity must be given some consideration when evaluating overall U.S. shipping capability.

TABLE IV
WORLD MERCHANT FLEET, 1968
(1000 GROSS TONS AND OVER)

RANK (DWT)	COUNTRY REGISTRATION	SHIPS	% TOTAL WORLD SHIPS	DEADWEIGHT TONS (MILLIONS)	% TOTAL WORLD TONNAGE
1	LIBERIA	1,613	8.3	45.14	16.5
2	NORWAY	1,308	6.8	30.59	11.2
3	U.K.	1,840	9.5	29.92	11.0
4	JAPAN	1,766	9.1	29.22	10.7
5	U.S. (PRIVATE) (MARAD)	2,071 967 1,104	10.7 5.0 5.7	25.46 15.35 10.11	9.3 5.6 3.7
6	USSR	1,634	8.4	11.91	4.4
7	GREECE	1,006	5.2	11.54	4.2
8	FED. GERMANY	909	4.7	9.32	3.4
9	ITALY	620	3.2	8.69	3.2
10	PANAMA	623	3.2	8.01	2.9
-	ALL OTHERS	5,971	30.9	63.41	23.2
TOTAL ALL COUNTRIES		19,361	100.0	273.21	100.0

TABLE V

RELATION OF U.S. MERCHANT FLEET TONNAGE
TO WORLD MERCHANT FLEET TONNAGE, 1955 THROUGH 1968.
(SHIPS 1000 GROSS TONS AND OVER IN MILLIONS
OF DEADWEIGHT TONS)



Source: U.S. Department of Commerce, Maritime Administration, World Merchant Fleet, (Washington, D.C.: Maritime Administration, 1969), p. 1.

In summary, the figures which show the U.S. solidly in fifth position worldwide are misleading, for they include much capacity which is of little real value. Conversely, the importance and the positive impact of "flag of convenience" ships is not reflected. In any case, the 12.5 per cent growth of U.S. private capacity from 13.6 million DWT in 1955 to 15.3 million DWT in 1968, has not compensated for the loss of 11 million DWT of Government owned capacity, nor has it kept pace with the 110 per cent growth experienced by the world fleet, as a whole, over the same period.¹ Based on the figures in the above tables, it can be reasonably projected that the Soviet merchant marine will surpass the U.S. flag merchant fleet, both in numbers of ships and tonnage capacity by 1972.

NATIONAL SECURITY ROLE

During his campaign for the presidency, Richard Nixon summarized the role of seapower, he said: "Seapower is the ability of a nation to project into the oceans, in times of peace, its economic strength; in times of emergency, its defensive mobility."² Mahan has more explicitly delineated the role and position of the merchant marine within this definition by stating; "Seapower in the broad sense --- includes not only the military strength afloat that rules the sea or any part of it by force of arms, but also the peaceful commerce and shipping from which alone a military fleet naturally and healthfully springs, and on which it securely rests."³

The national security roles for a merchant marine are not based only in presidential rhetoric or in the theoretical concepts of a maritime strategist, but for this country at least, they are grounded in the hard cold facts of historical reality.

¹Ibid., p. 1.

²VADM Ramage, "Remarks to N.Y. Yacht Club," p. 3.

³Alfred T. Mahan, The Influence of Seapower Upon History, (New York: Sagamore Press Inc., 1957), p. 25.

The interdependence of the naval and merchant arms of seapower started early in our national history, when our first naval ships were merchant ships converted to this role. In addition, many other merchant ships were armed and sailed as privateers to prey on enemy ocean commerce. This capability, for merchant ships to play a dual role, continued through the Civil War period but was drastically reduced thereafter by the introduction of armor plate and armor piercing ammunition to the naval arsenal. A few armed merchant cruisers and disguised Q-boats took part in both World Wars I and II, but their only real effect was to add a touch of romanticism to the otherwise conventional and businesslike war at sea.

Of course, the most important contribution of the Merchant Marine has been its inherent capability to move men and material. As the world, and therefore warfare, have become more complex, the size of armies and the amounts of equipment needed to support each man has grown. Our merchant fleet has traditionally been called upon to support overseas military requirements, from our initial expedition to Nassau in 1776 to Vietnam today, while maintaining the capability to meet the needs of the national economy. It met these dual responsibilities very well until the latter half of the nineteenth century, at which time our entire seapower structure, merchant and naval, went into eclipse.

The first inkling, as to how far we had fallen in our ability to meet our national commitments, came during the Spanish-American War. The United States could not move its forces to Cuba in its own shipping, and had to buy or charter foreign ships to meet the emergency. This, however, was just a forerunner of an even worse situation which would develop seventeen years later with the outbreak of World War I.

We could not handle our own seaborne commerce, and with the outbreak of war, the foreign maritime nations withheld their ships. As an example of the disastrous result, this country exported 257,172 bales of cotton in August, 1913, one year later in August, 1914, only 21,219 bales were exported.¹ "Before World I, ships were chartered for \$1 a ton. Two short months after the outbreak, the charter rate was \$13.88 a ton to areas outside the war zone, \$20 to \$21 to war zones - in 1914 dollars. In fact, shipping profits were so high that many ships were completely paid for from the profit of one voyage. The demand for ships also rose with sales prices climbing from \$60 a ton to \$300 a ton."²

The demand for capability was met by paying exorbitant freight and charter rates, confiscating and buying foreign ships, and by a belated building program, but the price was high and the waste great. Only the absolute necessity for a merchant marine to support our economy and its essentiality to the prosecution of the war effort could have made the price acceptable.

Again, as the world drifted toward World War II, our merchant capability became critical. There were not enough ships this time either, but we were better prepared, with an accelerated building program, inadequate though it proved to be, already begun. However, the enemy was more dangerous and the stakes were higher, because now the very existence and survival of our Allies as nations, depended on the ability to move cargo across the Atlantic. With this began the most prolonged, vicious, and all pervading battle of the war; the Battle of the Atlantic. In the words of Winston Churchill: "The Battle of the Atlantic was the dominating factor all through the war. Never for one moment could we forget that everything happening elsewhere, on land,

¹CASL, The American Merchant Marine, Hero/Stepchild, p. 3.

²Ibid., p. 3.

at sea, or in the air, depended ultimately on its outcome, and amid all other cares we viewed its changing fortunes day by day with hope or apprehension.¹

At the end of the long and bitter struggle, between Pearl Harbor and November 30, 1945, the Merchant Marine had moved over 268 million long tons of material as well as 7 million troops and 141,000 civilians overseas, and had returned 4 million troops and 169,000 civilians to the United States.²

Then came Korea, and each soldier required 5 tons of initial supplies and an additional 65 pounds of supplies and equipment daily to sustain him. Five million passengers, 22 million tons of petroleum products, and 52 million tons of dry cargo were transported to, from and within the combat theater; most of it by the Merchant Marine.³

And now Vietnam. About 98 per cent of all the weapons and cargo for the U.S., the Vietnamese, and our Allies, have been moved by sealift. In 1968, 1.1 million measurement tons of dry cargo moved to Vietnam each month by sea; an average of 38,000 tons a day. Also, 18 million barrels of petroleum products were sealifted each month in 1968, a large percentage of it being necessary to refuel aircraft used in the airlift of high priority cargo and troops to and from the theater.⁴ In addition to the bulk cargo, sealift has also delivered about 300,000 troops to the combat theater.

But the necessity to respond to crisis is not the whole story. Today the U.S. must import 66 of the 77 strategic raw materials and critical commodities necessary to keep our economy functioning. These materials, because of their bulk, move 99 per cent by sea and the U.S. has the capability to move much less than 5 per cent of the required total.⁵ Table VI, below,

¹Winston S. Churchill, The Second World War, Vol V: Closing the Ring (Cambridge, Mass.: The Riverside Press, 1951), p. 6.

²CASL, The American Merchant Marine, Hero/Stepchild, p. 19.

³Ibid., p. 30.

⁴VADM Ramage, "Remarks to the N.Y. Yacht Club," p. 7.

⁵Ibid., p. 9.

shows those raw materials, of which, 75 per cent or more of the normal requirement must be imported.

TABLE VI

ESSENTIAL RAW MATERIALS REQUIRING
75 PER CENT OR MORE IMPORTS

<u>ITEM</u>	<u>PER CENT IMPORTED</u>
NATURAL RUBBER	100
TIN	100
NATURAL FIBERS (HEMP, ETC.)	100
MICA	98
BERYL	91
CHROMITE	90
COLUMBITE-TANTALITE	90
MANGANESE ORE	86
BAUXITE	86
THORIUM	80
ANTIMONY	75
ASBESTOS	75
COBALT	75

Source: U.S. Department of the Navy, Bureau of Naval Personnel, Military Sea Transportation Service, (Washington, D.C.: Government Printing Office, 1962), p. 5.

In addition to the obvious requirement for tin, asbestos, and manganese, bauxite is essential to the manufacture of aluminum and chromite is used to harden steel.

Finally, the operation of a U.S. flag merchant fleet directly effects the U.S. international balance of payments. If the goods which are shipped in the American Merchant Marine were shipped in foreign ships, a loss in the amount of those charges would be sustained by the transportation section of the U.S. balance of payments accounts.

During the ten year period between 1957 and 1966, the United States experienced a total deficit of approximately \$23 billion in its balance of payments. For the same ten year period, the balance of payments impact of all U.S. merchant shipping operations, including the operations of foreign vessels chartered to U.S. companies, was a net gain of \$5.7 billion. Furthermore, it is likely that had the same volume of trade been handled by an entirely U.S. flag fleet, the favorable impact would have been increased to \$7.3 billion.¹

In addition to the obvious increase in the net balance of payments deficit, which would have occurred had there been no American Merchant Marine to carry our trade; it is interesting to speculate upon the effect of a U.S. flag fleet capable of carrying 50 per cent of our commerce instead of the 10 per cent or less average capability experienced over the period in question. If all the conditions upon which the Harbridge House study was based, hold true linearly as the capacity of the fleet increases; an increase in U.S. trade carried in U.S. ships from 10 per cent to 50 per cent would result in an additional \$24 billion favorable impact on the balance of payments. The \$23 billion deficit actually experienced would be wiped out. This is probably much too good to be true, but it is indicative of the tremendous impact which the Merchant Marine has upon this aspect of our national financial position.

¹Harbridge House Inc., The Balance of Payments and the U.S. Merchant Marine, (Boston: Harbridge House Inc., 1968), p. 7.

Thus, the Merchant Marine is historically and inextricably woven into our national economic fabric. It has been proved to be a necessary element of our national power and we have had to pay dearly when its capability has been allowed to deteriorate. And finally, recent trends and the current position of the fleet indicate continued decadence and loss of position relative to the other major maritime nations.

CHAPTER III

TRADITIONAL GOVERNMENT SUPPORT

The United States, early in its national life, acknowledged the importance of seaborne trade and the necessity for a nation to be able to carry a significant portion of this commerce in its own shipping. The Act of 1789 recognized this, and provided benefits to the ship operators, in the form of reduced customs, and also protected the small but growing shipbuilding industry by requiring American construction for U.S. flag registry.

This simple and relatively modest aid was all that was needed, in the way of Government support, to stimulate the exciting period of growth which culminated in the 1850s with the golden age of the clippership. The growth and leadership were not dependent, however, in any significant measure upon this Government support and aid. In the words of Nicholas Johnson, Maritime Administrator from 1964 to 1966, "It is extremely important for us to remember that technical advances were responsible for the 'golden era' that American merchant shipping enjoyed in the mid-nineteenth century. The men who owned and sailed our ships were constantly searching for - and finding - new and better ways of doing things. Our shipbuilding techniques were excellent and the high-speed clippers pioneered a wholly new concept of transportation economics. The decline of this pioneering spirit and the feeling that steam and steel were merely strange toys, had a lot to do with the decline of our shipping prosperity."¹

The ravages of the Civil War and the almost total rejection of the use of steam and steel took their toll and, except for the coastal trade, the U.S. merchant fleet all but disappeared from the seas for the next fifty years. In this period of technical stagnation and decline, the Government attempted

¹Nicholas Johnson, "The State of Our Merchant Marine," Naval Review, 1967, ed. by Frank Uhlig, Jr. (Annapolis, Md.: U.S. Naval Institute, 1966), p. 125.

several times to use mail contracts as a means of subsidizing and upgrading our capability. Unfortunately, the attempts were half-hearted and fragmented; but more importantly, even had they been well conceived and coordinated, there was not the drive, spirit, or vision available in the industry to kindle the rebirth of competitive operations.

And so, the United States drifted on toward World War I, and a major shipping crisis, with no coordinated program and no sense of direction. During the decade preceding the war, there was a growing realization that something had to be done, and a number of legislative and executive committees and commissions studied the problem. In the end, however, it was the war itself which pushed the Government permanently into the shipping business; which led in turn to the wide-ranging controls and support which are in effect today.

THE SHIPPING ACT OF 1916¹

This Act was designed primarily to meet the shipping crisis precipitated by the war. It established a Shipping Board, consisting of five members, as a permanent independent agency with wide powers of investigation, regulation and administration. This placed the Government firmly and inextricably in the business of control and administration of the nation's ocean commerce and its merchant marine.

It further, against some opposition, authorized the Board to purchase, construct, own and operate its own ships; this, in fact, created a federally owned and operated merchant fleet. The Secretary of the Treasury was the primary supporter of the Government fleet concept, for which he advanced three main arguments; "first, that private capital would not be forthcoming on reasonable terms; second, that by owning the vessels the government could

¹U.S. Statutes at Large, Vol. 39, Part I, pp. 728-738.

protect against avarice; and third, that since public investment was required to support ship operations, title to the ships should reside with the public. To these arguments President Wilson added a fourth, that Government owned ships could be used in a positive program of foreign trade promotion."¹

After organization of the Shipping Board in 1917, the major ship building program which the Act authorized was begun. By the time the program was halted in 1922, over 2300 ships had been constructed by the Government at a cost of \$3 billion.² Unfortunately, less than one-sixth of this construction had been completed by the war's end and the Government found itself with a large commercial fleet and no background or experience in this type of ship operation.

In summary, the Act, by establishing the Shipping Board and giving it broad regulatory powers, made the Government a major participant in ocean commerce. It also built the largest merchant fleet in the world, of which more than half was Government owned.

It created some major problems as well, most pressing of which was; what to do with the fleet now that it was in existence. In addition to lacking operational experience, the Shipping Board was limited by the Act to the duration of the war plus five years, as the period in which it could own and operate the ships. Further, the Act did not specify how, and under what conditions, ships could be transferred from Government to private ownership, nor did it indicate what was expected of the Merchant Marine in the future.

MERCHANT MARINE ACT OF 1920³

This legislation was enacted, "to provide for the promotion and maintenance of the American merchant marine, and to repeal certain emergency

¹Samuel A. Lawrence, United States Merchant Shipping Policies and Politics, (Washington, D.C.: The Brookings Institution, 1966), p. 39.

²CASL, The American Merchant Marine, Hero/Stepchild, p. 4.

³U.S. Statutes at Large, Vol. 41, Part I, pp. 988-1008.

legislation, and provide for the disposition, regulation, and use of property acquired thereunder ---."¹

In conformance with this stated purpose, the Act addressed the problems created by the Shipping Act of 1916, by directing the Shipping Board to determine required trade routes, provide ships to operate on these routes by sale or charter, or if no private operators came forward, operate the routes until such time as there were equitable bids for the ships. The Board was also directed to be sure to get an honest price for the ships it controlled and not just dump them on the market.

But perhaps the most important part of the Act was its statement of policy, in which the attitude of the Government toward the Merchant Marine was clearly spelled out for the first time. The policy as promulgated in Section 1 of the Act is as follows:

"That it is necessary for the national defense and for the proper growth of its foreign and domestic commerce that the United States shall have a merchant marine of the best equipped and most suitable types of vessels sufficient to carry the greater portion of its commerce and serve as a naval or military auxiliary in time of war or national emergency, ultimately to be owned and operated privately by citizens of the United States to do whatever may be necessary to develop and encourage the maintenance of such a merchant marine ---."²

Additional features of the Act provided for mail contracts to be let to trade route operators, specified U.S. repair of American ships where possible, and provided for loans for the construction of new ships. No direct subsidies to private operators were provided for; "However, it included three powerful indirect aids. First, the coastwise laws - tightened to eliminate temporary wartime access afforded foreign vessels - were extended to include distant island possessions. Second, upon a finding by the Shipping Board that adequate U.S. flag service was available, existing preferential rates on shipments for export were restricted to shipments made via American

¹Ibid., p. 988.

²Ibid., p. 988.

vessels. Third, the President was instructed to abrogate all treaties which restricted the right of the United States to impose discriminatory duties or tonnage taxes. These latter two proposals were never implemented.¹

There were many problems, however, with the implementation and operation of the Act. The effects of the war were passing and the shipping boom turned to bust. The Government was lucky to get \$30 per ton in 1922 for ships it had just built at a cost of over \$200 per ton.² This, in turn, made new construction unattractive and, as a result, no ships were built under the loan provisions of the Act. Further, the mail contracts were meager, poorly administered, and did not provide the desired financial assistance.

The private operators had no experience in the management of large fleets in competitive commercial trade and they could not match the skill of their foreign competitors. In addition, most of the private operators were undercapitalized and, to further aggravate the situation, there were many instances of injurious rivalries and bidding wars between the various companies vying for the trade routes.

MERCHANT MARINE ACT OF 1928³

The purpose of this Act was to encourage the construction of new shipping. To do this, it provided for two major authorizations. First, the size of the construction loan fund, provided by the Merchant Marine Act of 1920, was increased to \$250 million.⁴ This was done to encourage the procurement of modern competitive ships to replace the aging and inefficient wartime construction. Secondly, it expanded the authority to grant mail contracts, in order to provide a method by which operators could accumulate capital for ship construction, and as a means of circumventing the tradi-

¹Lawrence, Shipping, Policies and Politics, pp. 41 and 42.

²Ibid., p. 42.

³U.S. Statutes at Large, Vol. 45, Part I, pp. 689-698.

⁴Ibid., p. 692.

tional congressional antipathy to direct subsidies. The budgetary climate in this period was one of extreme hostility to any form of overt subsidy, so that mail contracts, at extremely liberal terms, were considered the only acceptable expedient. "The mail contracts were intended to convey a hidden subsidy, but in sufficiently modest amounts and under sufficiently ambiguous conditions that congressional opposition to shipping subsidies would not be aroused."¹

The Act of 1928 did not, however, provide clear directions for the awarding of the mail contracts nor for their administration. The Shipping Board floundered around and ultimately lost control. Contracts were let and payments were made without regard to the actual conditions which pertained on any given route. As a result, some lines got much more than they needed while others were not paid enough to allow them to compete adequately. In addition, the loss of control by the Shipping Board, led to other abuses including failure to meet the provisions of the ship replacement requirements, for which purpose the contracts were really let, and in some cases, actual fraud.

Conditions got progressively worse, culminating finally in the establishment of a special Senate committee, chaired by Senator Hugo Black, which conducted an investigation and held hearings from May 1933, until March 1934. The results of the investigation are best expressed in the following quote from the committee report:

"Private ownership of merchant and aerial transportation with government subsidy has resulted in a saturnalia of waste, inefficiency, unearned and exorbitant salaries and bonuses ---. Measured by results, the subsidy system, as operated, has been a sad, miserable, and corrupting failure."

The consequence of the obvious failure of the Act of 1928, to deal adequately with the problems of our commercial shipping industry and the speculation and peculation which its laxity fostered, led naturally to a complete revamping of the entire structure of Government support.

¹Lawrence, Shipping, Policies and Politics, p. 43.

²U.S. Congress, Senate, Investigation of Air Mail and Ocean Mail Contracts, S. Rept. 898, 74th Cong., 1st sess., 1935, pp. 39 and 40.

There was one small glimmer of progress which emerged from the shambles. Under the provisions of this Act and the Act of 1920, 58 sea going dry cargo ships were built for the U.S. flag fleet, in the period 1928 to 1936.¹ This was by no means an adequate replacement program, but it was a start.

MERCHANT MARINE ACT OF 1936²

This Act was the direct outgrowth of the national debate precipitated by the Black investigations, and the gross mismanagement which they revealed. The stated policy of the Act is as follows:

"It is necessary for the national defense and development of its foreign and domestic commerce that the United States shall have a merchant marine (a) sufficient to carry its domestic waterborne commerce and a substantial portion of the water-borne export and import foreign commerce of the United States and to provide shipping service on all routes essential for maintaining the flow of such domestic and foreign water-borne commerce at all times, (b) capable of serving as a naval and military auxiliary in time of war or national emergency, (c) owned and operated under the United States flag by citizens of the United States insofar as may be practicable, and (d) composed of the best-equipped, safest, and most suitable types of vessels, constructed in the United States and manned with a trained and efficient citizen personnel. It is hereby declared to be the policy of the United States to foster the development and encourage the maintenance of such a merchant marine."³

It is interesting to note that despite the proven inadequacies of the previous procedures, the goals and objectives for the Merchant Marine remain essentially identical with those espoused by the earlier legislation.

The Act was based on two key concepts and all of the actual operating provisions were designed to support these concepts or were direct outgrowths of them. First, the idea that there are certain essential trade routes which must be serviced by U.S. flag shipping - the concept first appeared in the Act of 1920 - was amplified and considerably strengthened. Secondly, it was stated that U.S. flag lines should be able to compete on a par with foreign

¹U.S. Department of Commerce, Maritime Administration, Maritime Subsidy Policy, (Washington, D.C.: Maritime Administration, 1954), p. 87. (Mimeographed.)

²U.S. Statutes at Large, Vol 49, Part I, pp. 1985-2017.

³Ibid., p. 1985.

shipping over the same routes. This parity concept recognized the higher building and operating costs which were incurred by U.S. operators and provided for subsidies to meet the situation. The overt subsidy was the major break with past government policy.

To ensure proper execution and administration of these concepts, the old Shipping Board, established by the Act of 1916, was dissolved and a five man Maritime Commission was created in its place. The previous ocean mail contracts, with all their aura of government boon-doggeling, and speculation, were also terminated. The Maritime Commission has since been expanded and revamped to become the Federal Maritime Board, for policy decisions, and the Maritime Administration, for policy and program implementation. However, the Act, as it is currently written and amended, is essentially as it was when first approved; the modifications having been more amplifications than changes.

The purposes and goals of the Act are carried out through:

- "1. Construction-differential subsidies on vessels built in the United States for use on essential foreign trade routes.
2. Operating-differential subsidies on vessels used on essential foreign trade routes.
3. Financial aid in the construction of vessels, either with or without construction-differential subsidies, by deferment of a portion of the purchase price (granting loans).
4. Applying an allowance of credit to the purchase price of new vessels for obsolete vessels taken in exchange.
5. Restrictions on the sale or use of vessels owned or acquired by the Maritime Administration.
6. Payment for national defense features incorporated in the vessels.
7. Low interest rates on construction loans.
8. Establishment of reserve funds with attendant income tax benefits to the vessels operators.

9. Construction of vessels for chartering to private operators.
10. Additional subsidies to offset the effect of Governmental aid paid to foreign competitors.
11. Guarantee of ship mortgages.
12. Training of citizens to serve on American merchant vessels.
13. Prescribing of minimum manning scales, minimum wage scales, and minimum working conditions for all officers and crews employed on vessels receiving an operating-differential subsidy, and other benefits to American seaman.
14. Authority to requisition or purchase vessels when advisable for the security of the national defense or during national emergencies.¹

The construction and operating subsidies and the funding of national defense features comprise the bulk of the payments under the Act and will, therefore, be discussed at greater length.

CONSTRUCTION SUBSIDY

The construction-differential subsidy is intended to make it possible for a ship operator to have new construction built in a U.S. shipyard, for approximately the same out of pocket costs as he would incur if building in a foreign yard. The Government absorbs the difference between U.S. and foreign building costs, up to 55 per cent of total cost, exclusive of national defense features, based on a series of calculations which are not particularly pertinent to this discussion.

This direct construction subsidy stimulated shipbuilding for the private U.S. flag merchant fleet as soon as it became effective. By the time the United States became a belligerant in 1941, 185 new ships built under its provisions had been delivered.² This modest beginning was completely overshadowed, however, by the tremendous wartime shipbuilding pro-

¹United States Comptroller General, Report on the Audit of the Federal Maritime Board and the Maritime Administration, H. Doc. 93, 82nd Cong., 1st sess. 1951, pp. 111 and 112.

²Committee of American Steamship Lines, Facts About Our American Merchant Marine, (Washington, D.C.: Committee of American Steamship Lines, 1964), p. 6.

gram. The total number of ships built by the Maritime Commission during the national emergency, from 1939 to 1945, was 5601, totaling more than 54 million deadweight tons, at a cost of \$13 billion.¹ Additional shipyards required to meet this mass demand for shipping construction capability cost another \$6 billion.²

At the conclusion of the war there was more than enough shipping available and therefore, construction under the provisions of the Act did not resume until 1951.

Table VII, which follows, shows the amount of construction subsidy paid by year, from 1951 through 1968 and also indicates the number of ships being subsidized. The results of this program can be measured by the number of ships which have been delivered and an analysis of their effect on the size of private segment of the fleet. Table VIII, shows the number of construction subsidy supported ships which were delivered in the period 1955 through 1968, and their capacity in deadweight tons. Table IX, shows the active, privately owned segment, of the U.S. flag fleet for the period 1952 through 1968 and its associated capacity in deadweight tons.

¹CASL, The American Merchant Marine, Hero/Stepchild, p. 9.

²CASL, Facts, p. 7.

TABLE VII
CONSTRUCTION DIFFERENTIAL SUBSIDIES 1951-1968
AND
THE NUMBER OF SHIPS BEING SUBSIDIZED

<u>YEAR</u>	<u>SHIPS</u>	<u>SUBSIDY (\$ IN THOUSANDS)</u>
1951	42	18,887
1952	37	9,008
1953	25	(-)852*
1954	4	5,538
1955	8	5,700
1956	15	15,982
1957	9	17,496
1958	20	27,369
1959	34	28,827
1960	44	73,985
1961	60	102,775
1962	51	140,765
1963	41	94,349
1964	39	78,399
1965	38	22,432
1966	44	26,828
1967	37	29,747
1968	36	<u>32,586</u>
		TOTAL PAYMENT 729,821

*The negative figure results from recapture of an overpayment in the prior period.

Source: U.S. Department of Commerce, U.S. Maritime Administration Annual Reports, 1951-1968, (Washington, D.C.: U.S. Government Printing Office, 1952-1969).

TABLE VIII
MARAD SUPPORTED NEW CONSTRUCTION DELIVERED 1955-1968

<u>YEAR</u>	<u>SHIPS</u>	<u>CAPACITY (DWT)</u>
1955	6	100,583
1956	5	144,200
1957	11	309,485*
1958	18	480,900
1959	15	512,279
1960	20	456,038
1961	24	503,603
1962	28	511,801
1963	31	513,731
1964	15	298,541
1965	13	246,000
1966	13	197,000
1967	12	149,000
1968	<u>21</u>	<u>404,000</u>
TOTAL	232	4,827,161

*Includes 3 conversions totaling 39,951 DWT capacity.

TABLE IX

PRIVately OWNED ACTIVE U.S. MERCHANT FLEET, 1952-1968

<u>YEAR</u>	<u>SHIPS</u>	<u>CAPACITY (DWT IN MILLIONS)</u>
1952	1158	14.125
1953	1181	14.452
1955	1042	13.174
1956	1059	13.537
1957	1012	13.133
1958	1007	13.429
1959	1023	13.976
1960	1008	14.088
1961	973	14.097
1962	985	14.568
1963	974	14.579
1964	963	14.729
1965	948	14.650
1966	965	14.961
1967	974	15.121
1968	967	15.346

Source: MARAD Annual Reports, 1952-1968.

It is evident from the foregoing tables that, in the last 15 years, while the actual number of ships is declining, the building program has replaced almost 3 million tons of capacity while adding another 2 million tons. And also, what is not immediately evident, is the fact that as a result of new construction, the American Merchant Marine possesses over half of the world's fastest cargo freighters.¹

NATIONAL DEFENSE FEATURES

Speed, as well as such requirements as additional compartmentation for increased watertight integrity, rearrangement of machinery to lessen susceptibility to battle damage, increased boom capacity, special added safety devices, and gun mounts or foundations are paid for as national defense features.² Table X, which follows, indicates the amount paid for these national defense features in ships built under the Act, for the period 1951 through 1968.

¹Department of the Navy, Bureau of Naval Personnel, The Expanding Scope of Seapower, (Washington, D.C.: Navy Department, 1967), p. 15.

²CASL, Facts, p. 4.

TABLE X
PAYMENTS FOR NATIONAL DEFENSE FEATURES, 1951-1968

<u>YEAR</u>	<u>PAYMENT (\$ IN MILLIONS)</u>
1951	12.776
1952	9.033
1953	(None paid)
1954	2.809
1955	1.515
1956	.653
1957	.377
1958	1.174
1959	1.197
1960	3.857
1961	2.916
1962	2.304
1963	1.278
1964	.626
1965	1.552
1966	1.364
1967	1.437
1968	<u>1.020</u>
TOTAL PAYMENT	45.888

Source: MARAD Annual Reports, 1951-1968.

OPERATING SUBSIDY

The operating differential subsidy is paid for essentially the same reason as the construction subsidy; to place the American ship operator in a position where he can compete against cheaper foreign costs. While the subsidy is paid to the operator, 80 per cent goes directly into crew's salaries; U.S. wage scales, in some instances, being as much as ten times greater than those of foreign competition. The computation of the subsidy amount is extremely complex because it is based on percentages of foreign operating expenses. In addition, this particular subsidy has a recapture feature which requires the operator to return part of the payment, if more than a certain percentage of corporate profit is realized. A complete description of the subsidy calculations and the recapture criteria are not considered necessary in this paper and, in fact, such a presentation would tend to distract attention from the actual subsidy payment.

Table XI shows the number of ships which were operated under the operating subsidy feature of the Act, for the period 1951 through 1968, and also indicates the net subsidy liability for each of these years. It indicates that the number of ships kept on the essential trade routes by subsidization has remained relatively constant, but that the cost of maintaining these ships and routes is going up all the time. Obviously, some breakthrough must be realized if this subsidy is not to become just a payment to prop up increased labor demands and inefficient operating practices.

TABLE XI

OPERATING DIFFERENTIAL SUBSIDY, NET LIABILITY, 1951-1968

<u>YEAR</u>	<u>SHIPS</u>	<u>SUBSIDY (\$ IN MILLIONS)</u>
1951	293	43.0
1952	296	36.4
1953	316	72.4
1954	329	100.8
1955	334	122.9
1956	305	113.4
1957	300	106.7
1958	309	111.9
1959	313	154.2
1960	312	157.9
1961	304	176.9
1962	314	167.3
1963	315	208.9
1964	318	186.6
1965	311	212.9
1966	309	174.1
1967	313	196.9
1968	307	<u>226.9</u>
TOTAL SUBSIDY LIABILITY		2,570.1

Source: MARAD Annual Reports, 1951-1968.

CARGO PREFERENCE

In addition to the subsidies and various other payments and benefits which are provided under the Act of 1936, the Government has a policy of cargo preference. This policy had its genesis in a 1904 law, which required that all military cargo move in U.S. registry shipping, provided it was available at reasonable rates.¹

Cargo preference is currently governed by Public Law 664, enacted in 1954, to amend the Merchant Marine Act of 1936, and it stipulates that at least 50 per cent of all Government-sponsored cargo must be carried in U.S. flag shipping to the extent that is available at fair and reasonable rates. This law covers cargoes which are generated by Government agencies for:

- (a) support for U.S. armed forces overseas,
- (b) military aid and support for allies,
- (c) economic assistance cargoes under the cognizance of Agency for International Development,
- (d) shipments made under Export-Import Bank Loans,
- (e) Public Law 83-480 agricultural shipments.

The cost of this indirect subsidy is the difference between U.S. shipping costs and the world market rate and has been estimated by the Maritime Administration as amounting to approximately \$80 million annually.² The effect of this provision has been to keep many old and uneconomical ships in operation. These ships generally belong to unsubsidized owners, who, with a few prominent exceptions, have made no provision for replacement programs and are thus being forced out of the industry.

In summary, the Government has rather lavishly supported the American Merchant Marine, by a system of direct and indirect subsidies, as well as

¹U.S. Statutes at Large, Vol 33, Part I, p. 518.

²William H. Riordan, "Toward Modernization of the Merchant Marine" (Unpublished Masters thesis, The George Washington University, 1966), p. 21.

many other financial aids and benefits, but the actual growth resulting from this aid has been minimal.

CHAPTER IV

NEW PROGRAMS AND PROPOSALS

Despite the picture of drift and unsuccessful pursuit of goals depicted by the facts and figures in the previous chapters, there are some encouraging signs within the industry and the Federal Government.

THE INDUSTRY

The facts of American shipping life are not going to change; it will always cost more to build ships in U.S. yards and to hire American seamen. The U.S. shipping industry has at last come to realize this, and is trying to meet the situation head on, and still beat its foreign competition in the market place. By ingenuity, innovation, and a willingness to question old methods and concepts, great strides are being made in efficiency of operations and most important, the savings generated by this increased efficiency have begun to create hope and optimism in all segments of the industry.

The greatest single innovation has been the introduction of the container concept by Malcolm McLean, the one-time trucking tycoon. "He got the idea that if he could combine the go-anywhere flexibility of trucks with the low cost of sea transportation, he could provide shippers with fast, safe, and more economical distribution of their products."¹ In this total package approach to shipping, standardized containers which can be moved by truck and rail, as well as by ship, are loaded aboard specially designed cargo ships for the transoceanic portion of their trip. This innovation meant that the items to be shipped could be packed into the container and sealed at the point of origin, moved both overland and across the ocean to their port of destination, and delivered unopened and undisturbed to the ultimate consignee.

¹Ottenberg, "Crisis at Sea," Washington Star, August 4, 1969, p. 5.

The savings which accrue to both the ocean shipper and the ship owner and operator using this method are dramatic.

The shipper now sees his goods loaded and sealed into what is really a large steel security box. There is no reason for the original seal to be broken until the container arrives at its ultimate destination. The security, thus provided, has greatly reduced pilferage which previously ran as high as ten per cent of such cargoes as radios and liquors.¹

The introduction of the containers has also eliminated the expensive overpacking and crating, which was required by the old break-bulk method of shipping, and at the same time, damage to the goods while in transit has been substantially reduced.

Finally, from the shippers point of view, the container concept has revolutionized his bill of lading, follow up, and claims procedures. No longer does he have to deal with a separate carrier for each different mode of transportation required to deliver his merchandise to the customers. By using a through bill of lading, the carrier which picks up the goods at the loading platform takes responsibility for the shipment all the way to its destination. Tracing actions, claims, and all the many other areas of shipper-operator interface are made easier for both parties.

The ship owner and operator sees even greater operational improvements and savings. The most important advance has been the tremendous reduction of in-port time.

Ships earn money only when they are at sea, and traditionally, it has been the assumption that in-port time would be 50 per cent of total voyage time. Thus, at least half a ship's operational life could be considered to be unproductive. Further, any error in the estimate of the various por-

¹Frederic C. Appel, "The Coming Revolution in Transportation," National Geographic, CXXXVI (September, 1969), p. 333.

tions of voyage time was generally on the bad side, and in-port times were longer than planned. In Vietnam, for instance, in-port time became so long that it was frequently two or three times greater than the total at-sea time for the round trip. When it is realized that it costs at least \$5,000 a day to keep an average cargo ship in port,¹ the reduction of in-port time, made possible by the use of containers, results in dramatic operational savings. Containerships now plan on in-port time as being 15 per cent, or less, of total voyage time. The contribution of the container to this great reduction is the ease with which it can be handled and moved by largely automated cranes. The cranes are installed as part of the ship or are included among the shore facilities at most modern ports. Because of the fast turnaround time now possible, the new American Lancer class ships of the U.S. Lines, make the round trip between the East Coast and Europe every 21 days. With their speed and efficiency and their large capacity, these ships can each replace 17 standard World War II freighters.²

In addition to the reduction in turnaround time, the use of containers has drastically reduced the costs of loading and unloading operations. The automation, now possible, has greatly reduced the size of the stevedor gangs required. As an example of the savings realized; it costs \$15 per ton to load or unload a ton of general cargo in the normal manner, in the Hawaiian trade. When the cargo is containerized, the loading and unloading costs are between 50 cents and \$1 per ton.³

The increased productivity of the containership concept has led to other innovations which can be considered outgrowths of this breakthrough. The first of these is the roll-on/roll-off (RO-RO) concept. In this tech-

¹Ottenberg, "Crisis at Sea," Washington Star, August 4, 1969, p. 5.

²"U.S. Shipping," Business Week, p. 52.

³Stanley Powell Jr., Chairman of the Board, Oceanic Steamship Co., "U.S. Shipping Industry," Naval War College Review, XXII (November, 1969), p. 13.

nique, the ship is configured so that trucks drive all containers on and off using their own trailers. In addition, all types of vehicles can be accommodated and are loaded and unloaded under their own power. This does away with the requirement for cranes entirely and makes possible even faster loading and unloading. Using this RO-RO method, the Ponce de Leon, a 700 foot, 26 knot ship, in service between New York and San Juan, can be completely unloaded and reloaded with its cargo of 260, 40 foot trailers and more than 300 cars or trucks in as little as 8 hours.¹

A second innovation is the barge ship which carries its cargo in pre-loaded floatable barges. There are several names which have been attached to ships built to use this concept. Prudential and Pacific Far East Lines call their's LASH (Lighter Aboard Ship), while Lykes Bros. Steamship Company call their's SEABEES (Sea Barge Ships).² The concept and technique is the same, however, and these ships have several distinct advantages and show great promise. Because the barges can be pre-loaded, they save time just as do the containers, and because the ships load and unload themselves using their own cranes, port requirements are at a minimum. Since the ships can receive and discharge cargo in a harbor, and float their barges to and from the port facility using tugs, docking charges all but disappear. The average \$5,000 a day charge to keep a conventional ship in port is reduced to approximately \$10.50, the cost of keeping a barge floating at a dock.³ In addition, these ships make it much more economical to service the many areas in the world which lack the port facilities to adequately handle the average cargo ship.

¹"U.S. Shipping," Business Week, p. 52.

²Ralph E. Casey, Acting President American Institute of Merchant Shipping, "Political and Economic Significance of the World's Merchant Marines into the 1980's," Naval War College Review, XXI (April, 1969), p. 10.

³Ottenberg, "Crisis at Sea," Washington Star, August 4, 1969, p. 5.

And finally, unitization and containerization of cargo has led to a bold new concept for the future; the Land Bridge. This is not a bridge over land, but, "a land-link between two major, disconnected bodies of water which are roughly opposite each other."¹ The link, in this case, would be a unit train, shuttling back and forth between the ships in port on opposite sides of the land barrier. The high utilization of the trains themselves, running fully loaded in each direction, and the ease, speed, and low cost of the load and unloading operations between the ships and trains, make the system economically attractive and potentially cheaper than a complete sea voyage around the continent. There are many problem areas which must be worked out, such as; control of freight rates by the ICC, traffic routing, and the design and procurement of specialized equipment.² If the system can be worked out and it proves economical; "From a transportation point of view, the land bridge could make the continental United States similar to a mountain pass which would be the most economical route for a great deal of the world trade to traverse. Control of this pass would present the United States with a lot of options it doesn't have today"³

These encouraging developments and the tremendous increases in productivity which they have already provided, recently prompted Andrew E. Gibson, the Maritime Administrator, to say;

"The revolution in technology puts American shipping at the dawn of a new clipper-ship era. You have to go back to the days of the clipper-ships to find a time with as much promise as this. The U.S. is the leader in techniques. The American shipowner can again make money, because he does it better than the competition and not just because of his subsidy."⁴

¹George D. Saunders, "Land Bridge, From Sea to Shining Sea," United States Naval Institute Proceedings, 97 (July, 1969), p. 45.

²Ibid., pp. 47 and 48.

³Powell, "U.S. Shipping Industry," Naval War College Review, p. 15.

⁴"U.S. Shipping," Business Week, p. 52.

THE GOVERNMENT

The Government too has taken a positive approach, and in October 1969, President Nixon announced a new maritime program designed to lead the way into this new era for American shipping. It is intended to, "--- replace the drift and neglect of recent years and restore this country to a proud position in the shipping lanes of the world."¹

The program is conceived as a modernization and update of the Merchant Marine Act of 1936, and as a challenge to all segments of the industry. It further recognizes the current budgetary climate and the latent hostility in Congress with regard to the payment of subsidies. Throughout the document, the fiscal responsibilities of all parties, particularly the Government, are stressed. The goals of the program are to; create opportunity and challenge, provide better Government administration, and to reduce the dependence of the industry upon Government subsidy while at the same time rebuilding our merchant fleet.

The President presented his program and proposals in four segments as follows:²

SHIPBUILDING INDUSTRY

The administration has designed this segment of the program to overcome the twin problems of low production rates and high production costs traditionally experienced by U.S. shipyards. These problems are caused by the hand crafting of each ship to an individual design and the consequent low relative labor productivity which is then added to the already higher U.S. wage scales, making the yards non competitive. The plan envisions a long-range building program, the introduction of standardized designs, and the use of mass production techniques to cut costs by providing a stable

¹U.S. President, Merchant Marine Press Release, p. 1.

²Ibid., pp. 1-4

environment and by improving efficiency. It is hoped that the continuation of a construction subsidy under these conditions, will not only make possible the replacement of obsolete U.S. flag capacity, but will also allow the U.S. shipbuilding industry to compete on the world market. The specific proposals for the shipbuilding industry are as follows:

1. Make it possible to build thirty ships a year for the U.S. flag fleet, vice the current level of ten.
2. Based on the provision of a long-term stable market, ultimately reduce the maximum construction differential subsidy from 55 to 35 per cent. The initial step would be a reduction to 45 per cent in fiscal year 1971 and a subsequent reduction of two per cent a year until the maximum level is down to 35 per cent.
3. Pay the construction subsidy directly to the builder instead of through the shipowner which is the current practice.
4. Extend the multi-year procurement system to the shipbuilding industry as a means of providing a more stable environment which it is hoped will lead to production efficiency and economies of scale.
5. Raise the ceiling on federally ensured mortgages from one to three billion dollars.
6. Extend the construction differential subsidy to bulk carriers, a segment of the industry which is not now covered by this subsidy.
7. Establish a commission which will report to the President on the status of the shipbuilding industry.

SHIP OPERATING INDUSTRY

This portion of the program addresses the part of the industry which has traditionally received the lion's share of the subsidy pie. The basic idea behind this segment of the proposal is do away with the subsidization

of inefficiency and provide incentive for improving operations, by allowing the operator to keep the fruits of his cost reduction efforts. The specific proposals for the ship operators are as follows:

1. Eliminate subsidies for maintenance, repair and subsistence costs and continue to subsidize only the higher U.S. wage and insurance costs. The wage subsidy would be tied to a broad wage index involving several sectors of the economy. The operator would not then be paid for the exact difference in seaman's wages nor would he lose subsidies when he made cost reductions.

2. Eliminate the recapture clause in the Merchant Marine Act of 1936, which requires the operator to pay back certain profits above a given level. This will provide an efficiency incentive and reduce Government administration costs.

3. Directly subsidize bulk carriers, which are not now covered by the present aid, and eliminate many of the hidden support payments now provided by premium freight rates.

4. Permit all operators in foreign trade, subsidized and nonsubsidized, to defer tax payments on reserve funds set aside for well defined ship replacement programs. Currently only operators receiving operating differential subsidy are granted this privilege.

5. Initiate a program of port renewal and modernization so as to receive the full benefits of the technological advances being experienced in all fields of transportation.

LABOR

This segment of the program is more of an admonition than a specific set of concrete proposals. It acknowledges the fact that previous Governmental policies have not fostered good labor practices. It also recognizes

that management and industry attitudes have not been as conducive to good labor relations as might be expected. And finally, it alludes to the me-too-ism of the many labor trades involved, which has resulted in disruptive work stoppages while one union made sure it got what another had just received.

The specific comments in this area are:

1. Labor and management must take this opportunity to find ways to solve their differences, without the disruptive work stoppages which have characterized past maritime operations.
2. The expansion of the industry must be accompanied by equal opportunity for employment for all minority groups.

RESEARCH AND DEVELOPMENT

This last segment of the program would enlarge maritime research and development which will be redirected to place greater emphasis on practical application of technological advances and on coordination of Federal programs with those of industry.

The program, as it currently stands, has met most of the problems of the previous legislation, but it has also ignored the pet theories of some segments of the industry and the problems of others. Chief among the omissions are the failure to authorize U.S. companies to build U.S. flag ships in foreign shipyards and the failure to specifically address the problems of the passenger liners and the Great Lakes operators.

Although the actual bill which will implement this new program has not yet been sent to Congress, it is obvious that it will cost money. The President himself acknowledged this when he indicated that subsidy expenditures would not increase in fiscal year 1970, but would increase modestly thereafter.¹ It is expected that the program will ultimately cost between

¹Ibid., p. 1.

400 and 450 million dollars annually vice the 350 million dollar level for fiscal year 1970. Despite the admitted rise in costs, the program, by providing incentives for increased efficiency, has dealt effectively with the most irritating drawback of subsidies, namely, the tendency to have the Government absorb the cost of inefficient methods and operations. It also has some bite in it, for in addition to providing for the gradual reduction of construction differential subsidies to a maximum of 35 per cent, it specifically states that, "If the challenge is not met, ---- the Administration's commitment to this part of our program will not be continued."¹ Further, the payment of the construction differential subsidies directly to the builder, and the extension of these subsidies to cover previously unassisted portions of the industry, has improved the overall image of Government aid in the eyes of prior opponents.² Lastly, the extension of the privilege of tax deferment, on reserve funds set aside for new construction, to unsubsidized operators, has met the most pressing requirement voiced by the leaders of that segment of the industry.³

The budgetary prospects for the program appear to be excellent at this moment, provided the necessary funding increases are, in fact, modest. Representative Garmatz (D-Md.), Chairman of the House Merchant Marine Committee, praised the program and announced his support immediately after it had been made public.⁴ Considerable support by other Congressmen of both parties has also been expressed, and in addition, all segments of the industry and labor appear to be united in basic support of the program. Despite a certain slowness in the submission of the bill on the part of the

¹Ibid., p. 2.

²"U.S. Shipping," Business Week, p. 57.

³Ottenberg, "Crisis at Sea," Washington Star, August 4, 1969, p. 5.

⁴"U.S. Shipping," Business Week, p. 57.

administration, there is a feeling that the various agencies will push it vigorously when presented, and that it will be passed.¹

¹ Ibid., p. 57.

CHAPTER V

SUMMARY

The American Merchant Marine has been an unstable industry; at its best, it has reached peaks rarely surpassed in creativity, productivity and beauty -- "But it was in shipbuilding and shipping that the greatest triumphs of early American industry and commerce were achieved --"¹; at its worst it has been an inefficient, backward, and poorly managed orphan, barely kept alive by a vast network of special privilege and subsidy.

Two world wars, and numerous lesser crises, in the twentieth century, as well as, economic and purely patriotic considerations have been used to prove the contention that the U.S. must have a large, modern, and vigorous merchant fleet if it is to meet it's commitments as a world leader. This contention has now been accepted as a basis for public policy planning as evidenced by the new program outlined by President Nixon. The program appears to offer an excellent opportunity to achieve the desired ends. The basic support of the industry, and broadly based and growing political support, indicate a general agreement, on the part of those most directly concerned, with the thrust and direction of the new program.

Obviously, there will be problems such as the omission of specific support for passenger liners. This segment of the fleet, in particular, is in a very critical condition, with no U.S. flag ships now operating on the prestigious North Atlantic run. The SS UNITED STATES, queen of the U.S. merchant fleet, Atlantic Blue Ribbon holder, and our last ocean liner in regular Atlantic service, has been recently laid up for an indefinite period. The passenger ships, despite years of subsidy, have consistently lost money

¹Encyclopedia Britannica in Statement of Policy/The Navy League of the United States, (Washington, D.C.: The Navy League, 1969), p. 1.

but, because of the national image involved, there is sure to be a political effort to save them.

This situation with the passenger liners also impinges on another area of possible difficulty. Since these ships are labor intensive, they have always been subject to labor problems. The maritime unions will do everything possible to keep from losing the jobs represented by these ships. This may help to counterbalance a very probable negative reaction by labor to the new methods of computing the operating differential subsidy; which will be based on the comparison of broad wage indexes instead of a direct job to job relationship. The five years of relative labor peace, which is an absolute requirement if the program is to achieve its goals, may be the one stumbling block which can not be overcome.

Another major area which has been totally ignored, are the problems of Great Lakes shipping. This segment of the industry has long been left out of general maritime legislation and may now be expected to attempt to bring enough pressure to bear to get some specific addressal of its problems.

Still, there are many signs of progress, with both the Government and the industry contributing constructively to a new feeling of optimism. By emphasizing the advancements in shipbuilding techniques, and by breaking the complete dependence of the builder upon the ship owner, both segments of the industry can make progress by emphasizing their own objectives and best interests. The improvement of Government-industry relations, and the attempt to remove the Government from several areas of control and regulation, should improve the management of the fleet. The unions also have shown a more moderate approach and have been maintaining labor peace. In view of these encouraging signs, it is entirely possible that the Merchant Marine

can turn the corner and, "--- take its place once again among the vigorous, competitive industries of this nation."¹

All segments of the industry now have the opportunity to take advantage of innovation, change, and an atmosphere of cooperation; perhaps for the last time for many years. In the words of a spokesman of the House Merchant Marine Committee, "This is a long-range attempt to make the industry competitive and the maritime industry is being told to fish or cut bait."²

¹U.S. President, Merchant Marine Press Release, p. 4.

²"U.S. Shipping," Business Week, p. 57.

BIBLIOGRAPHY

Public Documents

U.S. Comptroller General. Report on the Audit of the Federal Maritime Board and Maritime Administration, Department of Commerce and Predecessor Agency. H. Doc. 92, 82nd Cong., 1st sess., 1951.

U.S. Congress. House. Committee on Merchant Marine and Fisheries. The Soviets and the Seas. H. Rept. 1809, 89th Cong., 2nd sess., 1966.

U.S. Congress. Senate. Special Committee of the Senate. Investigation of Air Mail and Ocean Mail Contracts. S. Rept. 898, 74th Cong., 1st sess., 1935.

U.S. Department of Commerce. The Merchant Marine in National Defense and Trade, a Policy and a Program. Report of the Interagency Task Force on Maritime Policy. Washington, D.C.: Government Printing Office, 1965.

U.S. Department of Commerce. Bureau of Foreign and Domestic Commerce. Shipping and Shipbuilding Subsidies, by J.E. Songstad. Washington, D.C.: Government Printing Office, 1932.

U.S. Department of Commerce. Maritime Administration. Annual Reports 1951-1968. Washington, D.C.: Government Printing Office, 1952-1969.

_____. Assistance to Maritime Industries in Western Hemisphere Nations. Washington, D.C.: Government Printing Office, 1966.

_____. Maritime Subsidies. Washington, D.C.: Government Printing Office, 1969.

_____. Maritime Subsidy Policy. Washington, D.C.: Maritime Administration, 1954. (Mimeographed.)

_____. Merchant Fleets of the World: September 1, 1939 - December 31, 1951. Washington, D.C.: Government Printing Office, 1953.

_____. Merchant Fleets of the World: December 31, 1968. Washington, D.C.: Government Printing Office, 1959.

_____. This is MARAD. Washington, D.C.: Government Printing Office, 1965.

_____. U.S. Merchant Fleet: Composition. Washington, D.C.: Maritime Administration, 1969. (Mimeographed.)

_____. World Merchant Fleet. Washington, D.C.: Maritime Administration, 1969. (Mimeographed.)

U.S. Department of the Navy, Bureau of Naval Personnel. Military Sea Transportation Service. Washington, D.C.: Department of the Navy, 1962.

• The Expanding Scope of Sea Power. Washington, D.C.: Department of the Navy, 1967.

U.S. Maritime Commission. Handbook of Merchant Marine Development and Regulation in the United States. Washington, D.C.: Government Printing Office, 1940.

U.S. President. Message to the Congress. "Merchant Marine Program." Press Release. Washington, D.C.: The White House, October 23, 1969. (Mimeographed.)

• The Budget of the United States Government: Fiscal Year 1970. Washington, D.C.: Government Printing Office, 1969.

U.S. Statutes at Large, Vols., 33, 39, 41, 45, and 49.

Books

Chapelle, Howard I. The History of American Sailing Ships. New York: W. W. Norton and Co., Inc., 1935.

Churchill, Winston S. The Second World War. Vol V: Closing the Ring. Cambridge, Mass.: The Riverside Press, 1951.

Elden, Rodney M. Ship Management. Cambridge, Md.: Cornell Maritime Press, 1962.

Farrington, S. Kip Jr. Ships of the U.S. Merchant Marine. New York: E. P. Dutton and Co., 1947.

Ferguson, Allen R., et al. The Economic Value of the United States Merchant Marine. Evanston, Ill.: Northwestern University Press, 1961.

Gortes, Wytze. United States Shipping Policy. New York: Harper and Brothers, 1956.

Hamlyn, Paul. Ships. London: Paul Hamlyn Ltd., 1963.

Lawrence, Samuel A. United States Merchant Shipping Policies and Politics. Washington, D.C.: The Brookings Institution, 1966.

Mahan, Alfred T. The Influence of Seapower Upon History. New York: Samagore Press Inc., 1957.

Morison, Samuel E. The Oxford History of the American People. New York: Oxford University Press, 1965.

McDowell, Carl E. and Gibbs, Helen M. Ocean Transportation. New York: McGraw-Hill Co., 1954.

Newell, Gordon. Ocean Liners of the 20th Century. New York: Bonanza Books, 1963.

Zeis, Paul M. American Shipping Policy. Princeton, N.J.: Princeton University Press, 1938.

Reports

American Merchant Marine Institute, Inc. A New National Maritime Policy. New York: American Merchant Marine Institute, Inc., 1966.

Arthur D. Little, Inc. Ship Construction Differential Subsidies. Cambridge, Mass.: Arthur D. Little, Inc., 1961.

Carl, Robert A. Presentation for the House Armed Services Subcommittee on Seapower. Washington, D.C.: September 19, 1969. (Mimeographed.)

Committee of American Steamship Lines. Facts About Our American Merchant Marine. Washington, D.C.: Committee of American Steamship Lines, 1964.

• New Concepts for a Stronger Commercial Shipbuilding Industry. Washington, D.C.: Committee of American Steamship Lines, 1964.

• Progress of the Liner Fleet Under the Merchant Marine Act, 1936. Washington, D.C.: Committee of American Steamship Lines, 1964.

• The American Merchant Marine, Hero in War-Stepchild in Peace. Washington, D.C.: Committee of American Steamship Lines, 1966.

• The United States Bulk Cargo Fleet -- Prospects and Problems. Washington, D.C.: Committee of American Steamship Lines, 1965.

• The Untold Story. Washington, D.C.: Committee of American Steamship Lines, 1963.

• U.S. Cargo Preference. Washington, D.C.: Committee of American Steamship Line, 1965.

Harbridge House, Inc. The Balance of Payments and the U.S. Merchant Marine. Boston, Mass.: Harbridge House, Inc., 1968.

Hood, Edwin M. The Growing Spectre of the Soviet Union on the High Seas. Washington, D.C.: Shipbuilders Council of America, 1967.

Navy League of the United States. Statement of Policy. Washington, D.C.: Navy League of the United States, 1969.

Rapping, Leonard A. Federal Maritime Policy and Military Shipping Requirements. Santa Monica, Calif.: The Rand Corporation, 1963.

• Testimony Before the Joint Economic Committee, Subcommittee on Economy in Government. Washington, D.C.: September 24, 1969. (Mimeographed.)

Riordan, William H. "Toward Modernization of the Merchant Marine." Unpublished Masters Thesis, The George Washington University, 1967.

Shipbuilders Council of America. Annual Report, 1968. Washington, D.C.: Shipbuilders Council of America, 1969.

The Ocean Shipping Panel of the Transportation Council. Analysis of Construction and Operating Subsidies under Merchant Marine Act, 1936 as amended. Washington, D.C.: Ocean Shipping Panel, 1953.

Articles and Speeches

Appel, Fredric C. "The Coming Revolution in Transportation." National Geographic, CXXXVI (September, 1969), 301-41.

Bentley, Helen Delich. The Soviet Union is Racing Toward Maritime Supremacy." Navy, October, 1966, pp. 36 and 37.

Business Week. "Alaska's Oil Challenge." September 13, 1969, pp. 120-24.

_____. "U.S. Shipping Steers Back into the Money." December 13, 1969, pp. 52-27.

Carl, Robert A. Remarks at the Forty Second Annual Convention and American Merchant Marine Conference of the Propeller Club of the United States. St. Louis, October 9, 1968. (Mimeo graphed.)

Casey, Ralph E. "Political and Economic Significance of the World's Merchant Marines into the 1980's." Naval War College Review, XXI (April, 1969), pp. 4-13.

Clark, John J. "Flags of Whose Convenience." U.S. Naval Institute Proceedings. XCIV (October, 1968), 50-59.

Culver, John A., CDR, USNR. "Blue-Water American Merchant Ships, 1947-1965." Naval Review, 1966. Edited by Frank Uhlig Jr. Annapolis, Md.: U.S. Naval Institute, 1965.

Dye, Ira, CAPT, USN. "Sealift for Limited War." Naval Review, 1964. Edited by Frank Uhlig Jr. Annapolis, Md.: U.S. Naval Institute, 1963.

Holubowicz, R. P. "Transmodalism." U.S. Naval Institute Proceedings, XCIV (February, 1968), 64-73.

Hood, Edwin M. Remarks Before the 23rd Convention, Pacific Coast Metal Trades District Council. Clear Lake, Calif., May 5, 1969. (Mimeo graphed.)

_____. Remarks to the Summer Seminar on Shipbuilding of the Massachusetts Institute of Technology. Cambridge, Mass., August 13, 1969. (Mimeo graphed.)

Johnson, Nicholas. "The State of Our Merchant Marine." Naval Review, 1967. Edited by Frank Uhlig Jr. Annapolis, Md.: U.S. Naval Institute, 1966.

Karr, Albert R. "Nixon Readies Merchant Shipbuilding Plan Expected to be Biggest Since Korean War." Wall Street Journal. October 13, 1969.

Kendall, Lane C. "The Military Support Role of MSTS." Naval Review, 1965. Edited by Frank Uhlig Jr. Annapolis, Md.: U.S. Naval Institute, 1964.

_____. "U.S. Merchant Shipping and Vietnam." Naval Review, 1968. Edited by Frank Uhlig Jr. Annapolis, Md.: U.S. Naval Institute, 1968.

Laney, Robert V., CAPT, USNR and Winsam, Samuel B. "The Case for the Modernized Shipyard." U.S. Naval Institute Proceedings, XCV (September, 1969), 50-59.

McCurdy, John W., CDR, USCG. "The Emancipated, Aggravated, Indispensable American Seaman." U.S. Naval Institute Proceedings, XCV (May, 1969), 58-62.

McNeil, W. J. "The Economic Importance of a U.S. Flag Merchant Marine." Naval Review, 1968. Edited by Frank Uhlig Jr. Annapolis, Md.: U.S. Naval Institute, 1968.

Moorer, T. H., ADM, USN, CNO. Remarks Before the VFW National Convention. Philadelphia, August 19, 1969. (Mimeo graphed.)

Ottenberg, Miriam. "Crisis at Sea." Washington Star. August 3, 4 and 5, 1969.

Powell, Stanley Jr. "United States Shipping Industry -- Problems and Prospects." Naval War College Review, XXII (November, 1969), 5-17.

Ramage, Lawson P., VADM, USN, Commander MSTS. Remarks Before the New York Yacht Club. New York, May 15, 1969. (Mimeo graphed.)

Saunders, George D. "Land Bridge - From Sea to Shining Sea." U.S. Naval Institute Proceedings, XCV (July, 1969), 44-51.

Schofield, B. B., VADM, RN (Ret). "The British Merchantile Marine and Strategy." Naval Review, 1967. Edited by Frank Uhlig Jr. Annapolis, Md.: U.S. Naval Institute, 1966.

Skelton, R. A. "The Mapping of Vinland." American Heritage Magazine, October, 1965, pp. 9 and 10.

Stewart, Harris B. Jr. "Oceanography and the U.S. Merchant Marine." U.S. Naval Institute Proceedings, XCV (October, 1969), 68-77.

Thesis 118127
W2208 Walker
Government support
of the merchant marine
problems and prospects.

24 AUG 70	18782
27 JUL 71	20678
25 SEP 79	26261
10 MAR 86	30936

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